



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/713,929	11/16/2000	Hideki Tai	JP919990195	4074

7590 01/03/2006

Anne Vachon Dougherty Esq  
On Behalf Of IBM Corporation  
3173 Cedar Road  
Yorktown Heights, NY 10598

EXAMINER

HOSSAIN, TANIM M

ART UNIT PAPER NUMBER

2145

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/713,929	Applicant(s) TAI ET AL.	
	Examiner Tanim Hossain	Art Unit 2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kase (U.S. 6,668,249) in view of Karr Jr. (U.S. 2001/0022558).

As per claim 1, Kase teaches a mobile agent management apparatus comprising: a plurality of agent servers (column 19, lines 5-62); a registration server for maintaining location information of mobile agents (19; 5-62), wherein each of said plurality of agent servers comprises: means for maintaining history of movement of each of said mobile agents, and recording each successive movement performed (19; 5-62). Kase does not specifically teach the requesting of location update information to refresh the location of the mobile agent in the system. Karr teaches the requesting of location information in a mobile agent (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to request information as taught by Karr in the system of Kase. The motivation for doing so lies in the fact that the periodic updating may not be frequent enough, and an on-demand update is needed. Including Karr's teaching into Kase resolves this issue. Both inventions are from the same field of endeavor, namely the location monitoring of mobile agents.

Kase does not specifically teach the explicit bookkeeping of a number of movements made by the mobile agents. It would have been obvious to one of ordinary skill in the art at the time of the invention to include the ability to count movements into the system of Kase-Karr, as a counting component is very well known in the art, in light of the sequential recording of movements made by mobile agents. To count these movements constitutes an obvious step to one of ordinary skill in the art at the time of the invention. For an example of the keeping of a movement number, please see Ho (U.S. 5,943,621), column 5, line 53 – column 6, line 49.

Claim 6 is rejected on the same basis as claim 1.

Claims 3-5, 8, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kase-Karr in view of Ho (U.S. 5,943,621).

As per claim 3, Kase-Karr teaches the apparatus of claim 1, but does not specifically teach that said agent server further comprises comparator means for comparing the count in said counter with a predetermined threshold. Ho teaches a movement threshold measurement (column 5, line 53 – column 6, line 49). It would have been obvious to one of ordinary skill in the art at the time of invention to include the ability to calculate a threshold of movement in a mobile communication network as taught by Ho in the system of Kase-Karr. The motivation for doing so lies in the fact that calculating a threshold would allow proper management to take place with mobile agents that travel frequently, in the form of increased updates, or the like. All inventions are from the same field of endeavor, namely the location monitoring of mobile agents.

As per claim 4, Kase-Karr-Ho teaches the apparatus of claim 1, wherein the request generator of each of said agent servers generates a request to said registration server for updating

location information when the count of the accumulated number of movements of a corresponding mobile agent exceeds a predetermined threshold (Karr: Abstract; Ho: column 5, line 53 – column 6, line 49).

As per claim 5, Kase-Karr-Ho teaches the apparatus of claim 4, wherein said registration server comprises at least one register for maintaining accumulated number of movements and locations of each of said mobile agents in an associated manner and renews said location information of each of said mobile agents only upon receipt of requests for updating location information associated with a higher accumulated number of movements (Ho: column 5, line 53 – column 6, line 49; Karr: paragraph 0145).

As per claim 8, Kase-Karr-Ho teaches the method of claim 6, further comprising comparing said count of the accumulated number of movements to a threshold number of movements (Ho: column 5, line 53 – column 6, line 49).

As per claim 9, Kase-Karr-Ho teaches the method of claim 8, wherein said generating is done when said count of the accumulated number of movements exceeds said threshold number of movements (Ho: column 5, line 53 – column 6, line 49; Karr: 0145).

### ***Response to Arguments***

Applicant's arguments filed on September 29, 2005 have fully been considered, but are not persuasive.

a. Applicant asserts that Karr does not teach the requesting of location information.

Examiner respectfully disagrees. Karr, in the Abstract, states “outputting requested locations” of handsets and mobile agents.

b. Motivation to combine the Kase-Karr references has been discussed previously. In a system in which location information is kept (Kase), to request an update of locations is obvious, and motivation to do so certainly exists, which, among many others, is to keep the system up-to-date as far as current movements.

c. Ho teaches the use of a movement counter, which counts movements made, and compares them with a movement threshold. This constitutes a number of movements, compared to a threshold number, as claimed.

d. All other points of contention have been discussed in the rejection.

### *Conclusion*

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2145

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tanim Hossain whose telephone number is 571/272-3881. The examiner can normally be reached on 8:30 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Cardone can be reached on 571/272-3933. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tanim Hossain  
Patent Examiner  
Art Unit 2145



**ZARNI MAUNG**  
JURY PATENT EXAMINER